

REMARKS/ARGUMENTS

Favorable reconsideration of this application is respectfully requested.

Claims 21-36, 38-41, 43-52, 56, 61 and 62 are present in this application. Claims 37, 42, 53-55, and 57-60 are canceled. Claims 21-34, 43-52 and 62 stand withdrawn as directed to a non-elected invention. Claim 37 stands rejected under 35 U.S.C. §112, second paragraph. Claims 35-39, 41, 53, 56, 57 and 61 stand rejected under 35 U.S.C. §102(e) over U.S. 6,022,672 (Ikeda). Under 35 U.S.C. §103(a), claims 40, 54, 55, 58 and 59 stand rejected over Ikeda in view of JP 10-256344 (Tateyama) and claim 60 stands rejected over Ikeda in view of Tateyama and U.S. 5,273,585 (Shoga et al.). Claim 42 was found to be allowable if rewritten in independent form.

The Applicants greatly appreciate the indication that claim 42 contains patentable subject matter. Claim 35 has been amended to incorporate language from claim 42. It is respectfully submitted that claim 35, as well as claims 38-41 dependent therefrom, are in condition for allowance.

With the cancellation of claim 37, the §112, second paragraph, rejection is moot.

The Applicants would like to provide the following discussion related to the apparatus of claim 36. As described in page 25 line 16 to line 22 of the specification of the present invention, "the progress of the resolution reaction of the resist is inhibited during the transfer of the substrate from the aligner to the heating section, and thus in the heating section, the resolution reaction progresses on the same condition for the substrate in which the extent of the progress of the resolution reaction is made uniform." In other words, the present invention can have an effect that the line width after the development becomes uniform. Adjusting the inhibiting progress of a resolution reaction of a resist can be especially important when chemically amplified resist is used as described in page 87 line 26 to page 89 line 20 of the specification of the present invention.

In addition, since the reaction inhibiting section in the interface station is provided near the aligner, "the time of transfer between the aligner and the reaction inhibiting section is shortened, whereby the extent of the progress of the resolution reaction of the substrate transferred to the reaction inhibiting section is made more uniform, resulting in a rise in the uniformity of developing line width" as described in page 26, lines 1-8 of the present invention. See also Fig. 17 as a non-limiting example.

Turning to the rejection of claim 36, in Ikeda a substrate processing apparatus is shown in Fig. 8 and described in column 14, lines 17-27. The Office Action finds the "reaction inhibiting section" of Fig. 8 of Ikeda not located inside an "interface station" but in the "second station." To the contrary, the interface station in claim 36 includes "a reaction inhibiting section for inhibiting progress of a resolution reaction of a resist." This difference in the structure is very significant. Thus as the reaction inhibiting section is not in the second station having a heating section heating the substrate to progress the resolution reaction of the resist, the substrate immediately after the exposure is prevented from being affected thermally.

Claim 36 is patentable over Ikeda and therefore in condition for allowance.

As described in amended claim 56, the interface station has "a gas supply section for supplying a gas having a humidity lower than air and a temperature regulating section regulating either of the temperature or the humidity to make an amount of moisture adhering to the substrate when the substrate is transferred to the heating section smaller than an amount of moisture adhering to the substrate after exposure so that the progress of the resolution reaction of the resist is inhibited and dew formation on the substrate is prevented". However, there is no "temperature regulating section" provided in the interface section of Ikeda that regulates temperature or humidity. In addition, in the substrate processing apparatus of claim 56 the heating section for heating the exposed substrate is included in the

processing station. With this configuration, the substrate immediately after the exposure is prevented from being affected thermally. Claim 56 is also patentable over Ikeda.

The Office Action asserts that Shoga et al. regulates the temperature of the cooling gas. However, the apparatus of claim 56 has a temperature regulating section that can regulate the temperature or humidity. Further, the regulation prevents dew formation on the substrate. The apparatus of claim 56 is not suggested by Shoga et al.

It is respectfully submitted that the present application is in condition for allowance and a favorable decision to that effect is respectfully submitted.

Respectfully submitted,

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